

Amendments to the Claims:

This listing of claims will replace all prior versions and listings, of claims in the application:

5

Claims 1 though 71. (Withdrawn)

10 72. (Amended) A coated article comprising a substrate having at least two discrete known regions with continuous porous coatings, wherein each coating has a substantially uniform thickness and comprises a gelled network of particles, wherein each porous coating of the at least two regions has at least one compound attached thereto, and wherein a compound attached to one of the coatings of the at least two regions has a different molecular structure than a compound attached to another coating of the at least two regions.

15

73. A coated article according to claim 72, wherein each particle comprises one or more materials independently selected from the group consisting of carbon, activated carbon, fluorinated carbon, styrenedivinylbenzene copolymers, polystyrene, zeolites, oxides of antimony and oxides of metals present within Group III and Group IV of the Periodic Table.

20

74. A coated article according to claim 73, wherein each particle comprises one or more materials independently selected from the group consisting of alumina, silica, silicalite, fumed silica, oxides of tin and titania.

75. A coated article according to claim 73, wherein the particles are substantially spherical silica particles.

25

76. A coated article according to claim 72, wherein the particles have a primary particle size of less than 1000Å.

77. A coated article according to claim 72, wherein the continuous gelled network of particles further comprises a polymer of a substantially hydrolyzed metal alkoxide.

78. (Amended) A coated article according to claim 77, wherein
5 the substantially hydrolyzed metal alkoxide is substantially hydrolyzed tetraethoxysilane. tetraethoxysilane.

79. A coated article according to claim 72, wherein the substrate comprises an adhesive layer.

80. A coated article according to claim 79, wherein the adhesive
10 layer comprises polymers of hydrolyzed tetraethoxysilane.

81. A coated article according to claim 72, wherein the substrate has more than 10^4 separate porous coatings with attached compounds.

82. A coated article according to claim 72, wherein each of the separate porous coatings occupies an area on the substrate of less than about 10,000
15 μm^2 .

83. A coated article according to claim 72, wherein the porous coatings have a surface area measuring greater than 50 meters²/g.

84. A coated article according to claim 72, wherein at least one compound is attached to the porous coatings via a linker.

20 85. A coated article according to claim 84, wherein the linker is an organoalkoxysilane molecule attached to the porous coatings via siloxane bonds.

86. A coated article according to claim 84, wherein the linker comprises a photocleavable moiety or an enzyme cleavable moiety.

87. A coated article according to claim 84, wherein the linker comprises an acid labile moiety or a base labile moiety.

5 88. (Canceled)

89. A coated article according to claim 72, wherein the attached compounds are selected from the group consisting of nucleobase polymers, peptides and enalaprilat analogues.

90. A coated article according to claim 72, wherein each of the
10 porous coatings further comprises a fortifying layer of a polymer of hydrolyzed tetraethoxysilane.

91. A coated article according to claim 72, wherein the average pore size of each of the separate porous coatings substantially approximates the particle size.

15 Claims 92 through 157. (Withdrawn)